

REMARKS

This Amendment is submitted in reply to the final Office Action mailed on December 18, 2008. A Petition for a one month extension of time is submitted herewith this Amendment. The Commissioner is hereby authorized to charge \$130.00 for the Petition for a one month extension of time and any additional fees that may be required or credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112701-600 on the account statement.

Claims 1, 3-17 and 19-20 are pending in this application. Claims 2, 10-11 and 18 were previously canceled without prejudice or disclaimer. In the Office Action, Claims 14-15 are rejected under 35 U.S.C. §112, second paragraph. Claims 14-15 are rejected under 35 U.S.C. §101. Claims 1, 3-9, 12-17 and 19-20 are rejected under 35 U.S.C. §103(a). In response, Claims 1, 9 and 14-16 have been amended. The amendments do not add new matter. In view of the amendments and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

In the Office Action, Claims 14-15 are rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Patent Office alleges that it is unclear what method/process Applicant is intending to encompass since Claim 14 allegedly does not set forth any steps for the method/process. See, Office Action, page 2, lines 1-8. In response, Applicants have amended Claim 14 to recite, in part, a method of using thermostable α -amylase comprising the step of adding α -amylase to a wafer batter. The amendment does not add new matter. The amendment is supported in the specification at, for example, page 4, line 19-page 5, line 37. As amended, Claim 14 specifically recites a method having a processing step (e.g., adding thermostable α -amylase to a wafer batter) that is used to carry out the use of α -amylase to manipulate the textural attributes of a wafer. Similarly, Claim 15 has been amended to recite, in part, the method of Claim 14. Therefore, Applicants respectfully submit that the skilled artisan would understand what steps are involved in order to practice the presently claimed invention.

For at least the reasons set forth above, Applicants respectfully submit that Claims 14-15 fully comply with the requirements of 35 U.S.C. §112, second paragraph.

Accordingly, Applicants respectfully request that the rejection of Claims 14-15 under 35 U.S.C. §112, second paragraph, be reconsidered and withdrawn.

In the Office Action, Claims 14-15 are rejected under 35 U.S.C. §101 as allegedly being improper process claims under 35 U.S.C. §101. Specifically, the Patent Office alleges that the claimed recitation of a use is not a proper definition of a process claim. See, Office Action, page 2, lines 9-12. In response, and as discussed above, Claim 14 has been amended to recite, in part, a method of using thermostable α -amylase comprising the step of adding α -amylase to a wafer batter. The amendment does not add new matter. The amendment is supported in the specification (Preliminary Amendment) at, for example, page 5, lines 11-16. As amended, Claim 14 specifically recites a method having a processing step (e.g., adding thermostable α -amylase to a wafer batter) that is used to carry out the use of α -amylase to manipulate the textural attributes of a wafer. Similarly, Claim 15 has been amended to recite, in part, the method of Claim 14. Based on at least these noted reasons, Applicants believe that Claims 14-15 fully comply with the requirements of 35 U.S.C. §101.

Accordingly, Applicants respectfully request that the rejection of Claims 14-15 under 35 U.S.C. §101 be reconsidered and withdrawn.

In the Office Action, Claims 1, 3-4, 6-9, 13-17 and 19-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 2,615,810 to Stone ("Stone"). Claims 5 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over Stone in view of U.S. Patent No. 6,558,715 to Rey et al. ("Rey"). Applicants respectfully disagree with and traverse this rejections for at least the reasons set forth below.

Independent Claims 1, 9, 14 and 15 have been amended to recite, in part, a wafer having a humidity that is not greater than 6%. The amendments as discussed above are fully supported in the specification at, for example, page 6, lines 2-5. As such, embodiments of the present invention are directed to flour-based food products comprising wafers formed from wafer batters including α -amylase that is used to manipulate certain textural attributes of the wafers. Using α -amylase in wafers induces two main effects which will affect the wafer textures. First, the enzyme will induce a decrease in the starch viscosity at the baking step, leading to a modification in the expansion and the size of gas bubbles. Second, the enzyme will modify the macromolecular structure of starch leading to a modification of the physical properties in the solid cell walls of the dried wafer. The wafers of the present invention also have a final humidity that is not greater than 6%.

Applicants have surprisingly found that the enzymatic cleavage of starch operated by the α -amylase increases the level of reducing sugars and so facilitates the browning reactions of the wafer together with a positive impact on the flavour of the final products. Applicants have found that there exists a relationship between the level of α -amylase incorporated into the batter and the hissing time during baking (*i.e.*, the time period corresponding to the audible noise produced by gas and steam release at the beginning of the baking phase). See, specification, page 9, line 18-page 10, line 2. In contrast, Applicants respectfully submit that *Stone* fails to disclose each and every element of the present claims.

Stone fails to disclose or suggest a flour-based food product that is a wafer, the wafer having a humidity that is not greater than 6% as required, in part, by independent Claims 1, 9, 14 and 16. The Patent Office even admits that *Stone* fails to disclose or suggest a wafer. See, Office Action, page 3, line 1. Further, the moisture/humidity content of *Stone* is much greater than the maximum amount allowed by the wafer of the present invention (*i.e.*, 6%). For example, *Stone* discloses two proposed bread compositions in Examples I and II. In Example I, the moisture content is about 39.11%. See, Example I, col. 3, lines 19-35. In Example II, the moisture content is about 40.8%. See, Example II, col. 3, lines 60-74. Accordingly, *Stone* teaches the inhibition, or prevention, of the staling of bread, see, *Stone*, col. 1, lines 1-3, and discloses, at best, flour-based food products including biscuits, crackers or cake. At no place in the disclosure does *Stone* even mention the production of a wafer, let alone a wafer having a humidity that is not greater than 6%.

Moreover, Applicants also respectfully submit that there exists no reason why the skilled artisan would modify *Stone* to arrive at the present claims because *Stone* explicitly teaches away from the presently claimed subject matter. For example, the specification explicitly states that “the present invention is not at all relating to anti-staling. The anti-staling process can be explained as follows: when starch granules are dispersed in water and fully gelatinized by cooking, the crystalline structure and the starch polymers are solubilized. As this solution cools (*e.g.*, after baking in bread), polymers will form partially crystalline structure (retrogradation = recrystallisation). Amylases are often used to prevent staling (retrogradation) in high moisture systems, such as bread. In a baked wafer, the water mobility is not sufficient to cause retrogradation. Thus, our invention is not related to anti-staling.” See, specification, page 5, lines 16-24 (emphasis added).

In contrast, *Stone* teaches the inhibition, or prevention, of the staling of bread. See, *Stone*, col. 1, lines 1-3. In fact, *Stone* repeatedly states that the invention is related to “the inhibition, or prevention, of the staling of bread,” or the “retard[ation] of the rate of staling of bread,” and even states that “[w]hen used in the proper proportion, th[e] enzyme acts upon the starch of the crumb at the high temperatures of baking after the starch is gelatinized and partly degrades it to a form which, if current theories are assumed correct, no longer retrogrades and stales.” See, *Stone*, col. 1, lines 1-3 and 35-39; col. 2, lines 13-19. Therefore, it is clear that *Stone* explicitly teaches away from the presently claimed subject matter by teaching anti-staling. For at least the reasons discussed above, Applicants respectfully submit that Claims 1, 3-4, 6-9, 13-17 and 19-20 are novel, nonobvious and distinguishable from the cited reference.

The Patent Office alleges that because “*Stone* teaches other products besides bread, including products made from batter such as cake, doughnut and muffins,” that “it would have been obvious to one skilled in the art to use the enzyme in wafer because it is a bakery product and it is made of some of the same ingredients as other bakery product.” See, Office Action, page 4, lines 12-16. However, Applicants respectfully disagree because the disclosure of *Stone* does not even recognize the manufacture of a wafer product having a humidity that is not greater than 6%. As discussed above, *Stone* discloses products having moisture contents of about 40%. This is in direct contrast to the wafer of the present claims that requires a humidity that is not greater than 6%. As such, Applicants submit that it would not have been obvious to the skilled artisan to use the enzyme of *Stone* in the present wafer, especially since the water mobility in a baked wafer is not sufficient to cause retrogradation. For at least the reasons discussed above, Applicants respectfully submit that Claims 11, 3-4, 6-9, 13-16 and 19-20 are novel, nonobvious and distinguishable from the cited reference.

Accordingly, Applicants respectfully request that the rejection of Claims 11, 3-4, 6-9, 13-16 and 19-20 under 35 U.S.C. §103(a) as being unpatentable over *Stone* be reconsidered and withdrawn.


In the Office Action, Claims 5 and 12 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Stone* in view of U.S. Patent No. 6,558,715 to Rey et al. (“*Rey*”). Applicants respectfully submit that the patentability of independent Claims 1 and 9 as previously discussed renders moot the obviousness rejection of Claims 5 and 12 that depend from Claims 1 and 9,

respectively. In this regard, the cited art fails to teach or suggest the elements of Claims 5 and 12 in combination with the novel elements of Claims 1 and 9.

For the foregoing reasons, Applicants respectfully request reconsideration of the above-identified patent application and earnestly solicit an early allowance of same. In the event there remains any impediment to allowance of the claims that could be clarified in a telephonic interview, the Examiner is respectfully requested to initiate such an interview with the undersigned.

Respectfully submitted,

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